CLAIMS

1.   A method implemented in a printing device, the method comprising:

receiving a request to print a document;

partitioning the document into one or more blocks;

communicating, to each of one or more additional printing devices, at least one of the one or more blocks;

receiving, from the one or more additional printing devices, a set of print-ready bits corresponding to the blocks communicated to the one or more additional printing devices; and

using, at the printing device, the received print-ready bits to print the document.

2.   A method as recited in claim 1, further comprising:

converting, at the printing device, at least one of the one or more blocks into print-ready bits.

3.   A method as recited in claim 1, wherein:

receiving the request comprises receiving the request to print the document from a computing device via a network; and

communicating at least one of the one or more blocks comprises communicating at least one of the one or more blocks to each of one or more additional printing devices via the network.

4.   A method as recited in claim 1, further comprising:

determining a value P for a page of the document having a particular page number (*PageNumber*) based on how many printing devices (*NumPrinters*) are in the one or more additional printing devices by performing the calculation,

$$P=PageNumber \bmod NumPrinters; \text{ and}$$

communicating the page to the Pth printing device of the one or more additional printing devices.

5.   A method as recited in claim 1, further comprising:

identifying a plurality printing devices to which the printing device is communicatively coupled; and

selecting one or more of the plurality of printing devices as the one or more additional printing devices to which the one or more blocks are communicated.

6.   A method as recited in claim 1, wherein at least one of the blocks includes a different number of pages of the document than the other blocks.

7.   A method as recited in claim 6, further comprising:

sending a block of a test document to each of the one or more additional printing devices;

measuring, for each of the one or more additional printing devices, a time elapsed between sending the block to the printing device and receiving print-ready bits corresponding to the block from the printing device; and

determining a number of pages to be included in the block communicated to a particular additional printing device based on the measured time for the particular additional printing device relative to the measured times for the other additional printing devices.

8.   A method as recited in claim 1, further comprising:

receiving, from one of the additional printing devices, an indication that the one additional printing device is not able to convert a block to print-ready bits; and

removing the one additional printing device from the one or more additional printing devices.

9.   A method as recited in claim 1, further comprising:

beginning processing, at the printing device, of at least one of the blocks;

for a particular block, if an additional printing devices indicates it has generated the print-ready bits for the block then ceasing processing of the block and using the print-ready bits from the additional printing device to print the block of the document, and otherwise using print-ready bits generated by the printing device to print the block of the document.

10.   One or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more controllers of a printing device, causes the one or more controllers to perform acts comprising:

receiving a request to print a document;

partitioning the document into one or more portions;

communicating, to each of one or more additional printing devices, at least one of the one or more portions;

receiving, from the one or more additional printing devices, a set of print-ready bits corresponding to the portions communicated to the one or more additional printing devices; and

using, at the printing device, the received print-ready bits to print the document.

11.   One or more computer readable media as recited in claim 10, wherein the plurality of instructions further cause the one or more controllers to perform acts comprising:

sending at least a portion of a test document to each of the one or more additional printing devices;

measuring, for each of the one or more additional printing devices, a time elapsed between sending at least the portion to the printing device and receiving print-ready bits corresponding to at least the portion from the printing device; and

determining a number of pages to be included in the portion communicated to a particular additional printing device based on the measured time for the particular additional printing device relative to the measured times for the other additional printing devices.

12. A method implemented in a printing device, the method comprising:

receiving, from another printing device, one or more portions of a document to be printed at the other printing device;

converting the one or more portions to a print-ready format; and

returning the one or more portions in the print-ready format to the other printing device for printing at the other printing device.

13. A method as recited in claim 12, wherein returning the one or more portions comprises returning, in the print-ready format, each page of each of the one or more portions to the other printing device as soon as the print-ready format for the page has been generated.

14. A method as recited in claim 12, wherein returning the one or more portions comprises returning, in the print-ready format, each portion to the other printing device as soon as the print-ready format for the portion has been generated.

15. A method as recited in claim 12, wherein returning the one or more portions comprises returning, after each of the one or more portions has been converted to the print-ready format, the one or more portions to the other printing device.

16.   A method as recited in claim 12, wherein converting the one or more portions to a print-ready format comprises using a portable document format (PDF) interpreter to convert each of the one or more portions to print engine-ready raster bits.

17.   A method as recited in claim 12, wherein receiving the one or more portions comprises receiving both the document and an indication of the one or more portions in the document.

18.   A method as recited in claim 12, further comprising:

checking, in response to receiving the one or more portions of the document, whether the printing device can currently devote resources to converting the one or more portions;

if the printing device cannot currently allocate resources to converting the one or more portions, then communicating to the other printing device an indication that the printing device cannot currently devote resources to converting the one or more portions; and

otherwise, performing the converting and returning.

19.   One or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more controllers of a printing device, causes the one or more controllers to perform acts comprising:

receiving, from another printing device, one or more blocks of a document to be printed at the other printing device;

converting the one or more blocks to a print-ready format; and

returning the one or more blocks in the print-ready format to the other printing device for printing at the other printing device.

20. One or more computer readable media as recited in claim 19, wherein converting the one or more blocks to a print-ready format comprises using a portable document format (PDF) interpreter to convert each of the one or more blocks to print engine-ready raster bits.

21. A system comprising:

a principal printing device including a collective printing control module and a print engine;

a plurality of buddy printing devices, each coupled to the principal printing device via a network, and each including a buddy controller module;

wherein the collective printing control module is configured to communicate, upon receipt of a request from a computing device to print a document, a different portion of the document to each of the plurality of buddy printing devices;

wherein the buddy controller module of each buddy printing device is configured to convert the portion of the document received from the principal printing device into a print-ready format and return the portion in the print-ready format to the principal printing device; and

wherein the collective printing control module is further configured to transfer the portions in print-ready format to the print engine for printing.

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22. A system as recited in claim 21, wherein the collective printing control module is further configured to:

send a test document to each of the plurality of buddy printing devices;

measure, for each of the plurality of printing devices, a time elapsed between sending the test document to the printing device and receiving the test document in print-ready format from the printing device; and

determine a number of pages to be included in the portion communicated to a particular buddy printing device based on the measured time for the particular buddy printing device relative to the measured times for the other buddy printing devices.

23. A system as recited in claim 21, wherein the buddy controller module of each buddy printing device is further configured to:

check, in response to receiving the portion of the document, whether the printing device can currently devote resources to converting the portion;

if the printing device cannot currently devote resources to converting the one or more portion, then to communicate to the principal printing device an indication that the printing device cannot currently devote resources to converting the portion; and

otherwise, to convert the portion of the document received from the principal printing device into a print-ready format and return the portion in the print-ready format to the principal printing device.